



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,053	10/28/2005	Henri Lee	Q87051	1770
23373 7590 08/04/2009				
SUGHRUE MION, PLLC				
2100 PENNSYLVANIA AVENUE, N.W.				
SUITE 800				
WASHINGTON, DC 20037				
EXAMINER				
SAINT CYR, JEAN D				
ART UNIT		PAPER NUMBER		
2425				
MAIL DATE		DELIVERY MODE		
08/04/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/529,053

**Applicant(s)**

LEE, HENRI

**Examiner**

JEAN D. SAINT CYR

**Art Unit**

2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/28/2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Response to Amendment**

This action is in response to applicant's amendment filed on 07/20/2009. Claims 1-19 are still pending in the current application. This action is made **NON-FINAL**.

**Response to Arguments**

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hennenhoefer et al in view of Wider et al, US No. 5775927.

Re claim 1, Hennenhoefer et al disclose a System for the distribution of television type video signals with a frequency band of up to about 5 to 900 MHz(signals in the frequency range of 5 MHz to several GHz,0034) , the said system comprising:

an input coaxial cable adapted for connection to a TV antenna or to a cable television network(see fig.1, element 50, coaxial cable);

an output coaxial cable adapted for connection to a television set(see fig.1, element 28, coaxial cable);

a first input processing unit comprising a coaxial input terminal , at least one low current terminal for twisted wire pairs and processing means for processing TV signals output from the coaxial cable so as to transform them into signals with substantially the same transmission characteristics on the same frequency band on a twisted wires pair(see fig.1, element 38),

at least one second output processing unit comprising a low current input port for twisted wire pair, a coaxial output terminal and processing means for processing signals output from a twisted wires pair connected to the first input processing unit so as to transform them into signals substantially identical to the signals output from the said coaxial cable(see fig.1, element 26); and

at least one connecting cable consisting of twisted wire pairs connecting the first processing unit to the second processing unit (see fig.1, element 32).

But did not explicitly disclose Wherein the first input processing unit comprises means of cutting off the signal transmission in the case in which a coaxial cable is not connected to the coaxial output terminal of the second input processing unit .

However, Wider et al disclose the coaxial connector further includes a resistor connected to the rear contact. The resistor is effectively bypassed when the front and rear contacts of the contact assembly are engaged with one another. However, the resistor functions to terminate the signal transmission when the front and rear contacts of the contact assembly are not engaged, col.2, lines 46-67; col.3, lines 1-7.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the system of Hennenhoefer in introducing self-terminating coaxial connector, as taught by Wider, for the benefit of limiting radiation or eliminating all electromagnetic disturbances..

Re claim 2, is met as previously discussed with respect to claim 1.

Re claim 5, is met as previously discussed with respect to claim 1.

Re claim 6, Hennenhoefer et al disclose in which one twisted wires pair in the said connecting cable acts as a loop back line between the second and the first processing unit to transmit a connector present or absent signal to the cut-off means (the signals appearing at the input ports 62 are combined, looped back,0045).

Re claim 7, Hennenhoefer et al disclose in which the first input processing unit comprises signal processing means , a cross connect and several low current output terminals for twisted wire pairs each connected to the cross connect(see fig.1, element 38 where a plurality of twisted wire pairs are connected) .

But did not explicitly disclose the cut-off means acting between the cross connect and the said output terminals so as to cut off transmission of signals between the cross connect and the output terminal for which the lack of a plugged-in connector is detected.

However, Wider et al disclose the coaxial connector further includes a resistor connected to the rear contact. The resistor is effectively bypassed when the front and rear contacts of the contact assembly are engaged with one another. However, the resistor functions to terminate the signal transmission when the front and rear contacts of the contact assembly are not engaged, col.2, lines 46-67; col.3, lines 1-7.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the system of Hennenhoefer in introducing self-terminating coaxial connector, as taught by Wider, for the benefit of limiting radiation or eliminating all electromagnetic disturbances.

Re claim 8, Hennenhoefer et al disclose in which a sub-cross connect assembly is installed between the first and the second processing units, with at least one cable consisting of twisted wire pairs connecting the first processing unit to the sub-cross connect assembly (see fig.1, element 32) , and at least one other cable consisting of twisted wire pairs connecting the sub-cross connect assembly to the second processing unit , the said second unit comprising a coaxial output terminal and at least one output terminal for twisted wire pairs(see fig.1, element 26 that has a modular jack input and a coaxial cable output).

Re claim 9, Hennenhoefer et al disclose in which the second processing unit is in the form of an adapter comprising a low current connector for twisted wire pairs adapted so that it can be plugged onto a low current terminal for twisted wire pairs connected to the said sub-cross connect assembly for a cable consisting of twisted wire pairs(see fig.1, element 26 that has a modular jack input and a coaxial cable output).

Re claim 10, Hennenhoefer et al disclose in which the twisted wires pair that transmits the transformed TV signals is shielded(see fig.1, element 22).

Re claim 11, Hennenhoefer et al disclose in which the first input processing unit is an active unit comprising active processing means(The bandpass filters 216, 218 may be electronically controlled by the DSP, 0053).

Re claim 12, Hennenhoefer et al disclose in which the active processing means comprise an amplification stage(amplifiers,0054).

Re claim 13, Hennenhoefer et al disclose in which the processing means of the second processing unit comprise passive means such as a balun(see fig.1, element 34).

Re claim 14, Hennenhoefer et al disclose in which the second processing unit is provided with a low current terminal connected to the input port through a modulator to route signal on a loop back twisted pair(see fig.1, modulator).

Re claim 15, Hennenhoefer et al disclose TV signals processing unit with a frequency band varying from 5 to 65 MHz for the return channel and 86 to 862 MHz for the down channel the said processing unit comprising a coaxial input terminal(signals in the frequency range of 5 MHz to several GHz,0034) processing means for transforming TV signals output from the input terminal in signals with substantially the same transmission characteristics on the same frequency band and that can be transmitted for a twisted wires pair, and at least one output terminal for twisted wire pairs(see fig.1, element 38),

But did not explicitly disclose characterized in that it also comprises means of cutting off the signal transmission acting on the input side of output terminals to cut off the signal transmission at an output terminal that is not connected indirectly, advantageously through a second output processing unit connected to the said terminal through a cable consisting of twisted wire pairs, to a coaxial cable connected to a TV set.

However, Wider et al disclose the coaxial connector further includes a resistor connected to the rear contact. The resistor is effectively bypassed when the front and rear contacts of the contact assembly are engaged with one another. However, the resistor functions to terminate the signal transmission when the front and rear contacts of the contact assembly are not engaged, col.2, lines 46-67; col.3, lines 1-7.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the system of Hennenhoefer in introducing self-terminating coaxial connector, as taught by Wider, for the benefit of limiting radiation or eliminating all electromagnetic disturbances..

Re claim 16, Hennenhoefer et al disclose a first input processing unit comprising a coaxial input terminal and at least one twisted wire pair output terminal (see fig.1, element 38);

at least one second output processing unit comprising a twisted wire pair input terminal and a coaxial output terminal(see fig.1, element 26) ;

an input coaxial cable connected to the coaxial input terminal of the first input processing unit(see fig.1, element 50, coaxial cable);

an output coaxial cable connected to the coaxial output terminal of the second output processing unit(see fig.1, element 28, output coaxial cable); and

at least one twisted wire pair cable connecting the first input processing unit to the second output processing unit(see fig.1, element 32),  
wherein:

the first input processing unit transforms signals from the input coaxial cable into signals on the twisted wire pair cable(see fig.1, element 38); and

the second output processing unit transforms signals from the twisted wire pair cable into signals on the output coaxial cable(see fig.1, element 26).

But did not explicitly disclose the first input processing unit comprises means of cutting off the signal transmission in the case in which a coaxial cable is not connected to the coaxial output terminal of the second input processing unit .

However, Wider et al disclose the coaxial connector further includes a resistor connected to the rear contact. The resistor is effectively bypassed when the front and rear contacts of the contact assembly are engaged with one another. However, the



resistor functions to terminate the signal transmission when the front and rear contacts of the contact assembly are not engaged, col.2, lines 46-67; col.3, lines 1-7.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the system of Hennenhoefer in introducing self-terminating coaxial connector, as taught by Wider, for the benefit of limiting radiation or eliminating all electromagnetic disturbances.

Re claims 17-18, are met as previously discussed with respect to claims 11 and 12.

Re claim 19, is met as previously discussed with respect to claim 1.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hennenhoefer et al in view of Wider further in view of Georger et al, US No. 5950111.

Re claim 3, Hennenhoefer et al did not explicitly disclose in which the low current output terminal of the first input processing unit comprises means of detecting the presence of a low voltage connector connected to the twisted wires cable and plugged into the said output terminal.

However, Georger et al disclose in which the low current output terminal of the first input processing unit comprises means of detecting the presence of a low voltage connector connected to the twisted wires cable and plugged into the said output terminal(The terminating means is designed to properly terminate the output signal when an unshielded twisted-pair cable is not connected to an output signal, col.3, lines 19-24).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the system of Hennenhoefer in view of Wider introducing detecting the presence of a low voltage connector connected to the twisted wires cable

and plugged into the said output terminal, as taught by Georger, for the benefit of cutting off the signal whenever there is no twisted wire pairs connected at the output of the first processing unit.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcyr whose phone number is 571-270-3224. The examiner can normally reach on M-F 7:30-5:00 PM EST. If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reached on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean Duclos Saintcyr /

/Brian T. Pendleton/  
Supervisory Patent Examiner, Art Unit 2425